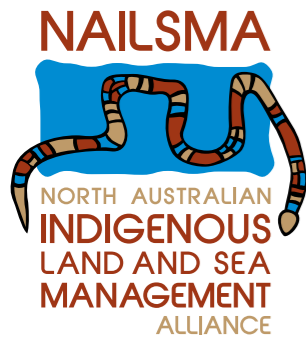


# KANTRI LAIF

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*message  
from the*  
**Chief  
Executive  
Officer**

*Reflections and goodbye*

**Over the past decade I have had very few moments to reflect on the collective achievements NAILSMA has made across northern Australia. But recently, I found a few moments to do just that.**

We all know that too much of our time is taken up by the negative issues surrounding Indigenous affairs, and this is why Kantri Laif was created—to tell the stories of innovation, of enormous achievement and of the dedication that Indigenous people in northern Australia have to the management, development and sustainable use of their lands and waters, just like our ancestors have done so for many thousands of years. Indigenous land and sea managers do this not just for themselves, but for all humanity. I think Kantri Laif has a strong future to keep telling these important stories to the world and to share amongst ourselves.

After Mark Horstman, David Epworth and Peter Cooke approached me to take on the task of establishing NAILSMA, I embarked on the job, without an intentionally clear way forward. In hindsight, I believe this was the key to allow the organization to be established through key northern forums attended by Traditional Owners and land and sea managers—the actual practitioners. Held at Menngen, Bizant and Yiramalay, these forums set the direction for NAILSMA and importantly for how I was to ensure that local people were always central to any future for the organization just as they currently are for the north to achieve true sustainable development.

My first trip was to the Mitchell Plateau to meet with Wunambal Gaambera Traditional Owners. If only I could remember every trip as I do that one, then I would have the best memory of all. Shortly after, I employed Lisa Binge as our first Project Officer. Lisa was instrumental in those early days.

Of course, the future for an organization like NAILSMA was an exciting prospect, particularly coming to the era of post-determination, where Traditional Owners of the lands and waters returned were now faced with the questions of ‘how do we consolidate these wins?’ and ‘how do we build resilience into the northern community through appropriate social, cultural and economic development?’

One of the first jobs I had was to find an Indigenous and independent Chair for the organization, someone who is well known, respected and has the time and dedication to the north. I was pointed in the direction of Peter Yu, and it was his intellect and humanity that I owe so much of NAILSMA’s success, as thankfully he accepted the offer and I am heartened that he continues as the Independent Chair of NAILSMA Ltd, growing a solid Board for the future.

During the last 10+ years, we have shifted national thinking in many critical areas—Ranger and Indigenous Protected Areas investments, Water Policy and Planning, Turtle and Dugong Conservation, marine use, Indigenous engagement in research, northern development, carbon research and business development, biodiversity conservation, data capture, use and management, climate change and Traditional Knowledge conservation and many other areas. We have done a lot of collaborative work with colleagues from the philanthropic community, many Governments, and the United Nations University and now one of our flagship projects is being taken to other countries around the world—fire abatement and all it entails for local livelihoods to Indigenous people. Ken Wilson, Henrietta Marrie and Sam Johnston have been tremendous.

But, we have lost many great people, both Indigenous and non-Indigenous along the way who have dedicated themselves to advancing Indigenous interests in the region. Sadly, losing a staff member reminds us all about the tragedy and hardships a lot of our people, particularly younger people face in this world. We all miss those people lost on the journey.

This led me to believe that caring for country, is not just about caring for the physical place we call ‘country’ but it is also about caring for the spiritual, social, economic and most importantly, the human side to everything we do—caring for each other is the most important thing we can all do.

I write this as my last post as the Editor of Kantri Laif and as the CEO of NAILSMA, as some of you know that I am embarking on a new journey with the Northern Land

Council, as their CEO commencing in February 2014. I wouldn’t and couldn’t leave without thanking just a few individuals and acknowledging a few others. Firstly, those three men that asked me to take the job, I owe a lot to them in asking me. I’m still not sure if it was a ‘set up’ or if they somehow had faith in me, but nonetheless, it turned out to be a fantastic journey. Peter Yu can’t go without mention as well. He has been tremendous as a mentor but more importantly as a friend and his integrity has never failed.

All of my staff and colleagues have been amazing to work with, its been more of a collaboration of true proportions rather than a top down driven environment in NAILSMA and I thank them for their hard work and dedication to me and what I have attempted to achieve. Jess Lew Fatt, Samara Erlandson, Rod Kennett, Glenn James, Janely Seah, Lorrae McArthur, Micha Jackson, Andrew Plate, Angela Shima, Erica McCreedy, Christy Davies, Billee McGinley, Leonie Molloy, Brianna Shaw, Vanessa deKoninck, Mikaela Earnshaw, Ting Shi, Christine Michael and Anna Boustead. I won’t name all my previous staff members but they know who they are. I have also had a number of close confidants who have done more than their fair share of hard work for NAILSMA and Indigenous people—Peter Whitehead, Paul Josif, Jeremy Russell-Smith and Teik Oh.

Patrick Dodson has provided enormous support to our purpose and has been a personal friend, with an enormous heart, intellect and vision. We would all be the poorer if Patrick wasn’t part of our journey. Paul Lane has always lent his strategic brain to our humble cause and Joe Ross was tremendous as the Chair of the IWPG, as he was of the Northern Taskforce.

It’s clear that there are many people that have played an important role, but special mention goes to the Traditional Owners and land and sea managers of northern Australia who have been amazing to work for, and that, makes my departure from NAILSMA all the more harder. Without your hard work, my time at NAILSMA wouldn’t have been as fruitful as it has been, and it wouldn’t have been the lifetime success it has been for me. I am indebted to many of you in the bush, and in the towns doing the hard yards for all of us in Australia and the world.

Most of all, I thank my mother and father for their love, guidance and dedication over the past decade and indeed lifetime—I miss them both dearly. My family—Belinda, Jacana, Olive and Acacia have been my inspiration and I owe them much for putting up with my constant travel and early onset of madness and hair loss during this period of time.

*See you all soon*  
*Joe Morrison*

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**Warning**

Aboriginal and Torres Strait Islander readers are advised that this publication may contain images and words of people who have died.

**Front cover**

NAILSMA Directors (L-R) Ron Archer and Teddy Carlton.



(L-R) Joe Morrison, Kevin Rogers, Clarry Rogers, Walter Rogers and Bill Blackley show ABC TV 7.30 NT team Wugali Lagoon at Ngukurr.

**Traditional Owners of the Roper River catchment made headlines in November when ABC TV 7.30 NT featured a story on their struggle for water rights and economic development.**

NAISMA CEO Joe Morrison also featured in the story, which was filmed during a visit to Ngukurr community. NAISMA and the Northern Land Council have been working with Traditional Owners to better inform policy-making decisions affecting water resource management on their country, and to persuade the government to reinstate the Strategic Indigenous Reserve.

During the visit, Traditional Owners Kevin, Walter and Clarry Rogers expressed their concerns about over-allocation affecting the flow of the springs that are the source of the Roper River, particularly during the late dry season. Scientific studies show that if flow is reduced too much during the dry season, it may allow tidal saltwater to come further up the river, affecting the supply of fresh water for Ngukurr. As Mr Morrison added, 'The fact that Ngukurr's water supply is already being affected is a great concern'.

The Yugul Mangi Development Aboriginal Corporation (YMD) is hoping to start a small commercial farm just outside of Ngukurr, to provide the community with fresh fruit and vegetables as well as a sustainable source of local jobs and income. However YMD CEO Bill Blackley said any impact on the local natural supply of fresh water will impede irrigation for the proposed farm. 'We can't irrigate our crops with brackish water', he explained.

Traditional Owners Marjorie Hall, Valmai Roberts, Marianne Roberts and Sheila Conway raised concerns about the importance of groundwater to maintaining important cultural sites and stories. Marjorie Hall told the ABC that mines in the region use large amounts of water, but because mining activities are excluded from the NT Water Act, mining companies do not have to account for their water use or even apply for a licence to extract water. Mrs Hall spoke of her fears that the combination of over-allocation and unlicensed water use will cause important sites such as springs, billabongs and creeks to dry up. 'We all need water, for life', she said.

Earlier this year, the NAISMA Indigenous Water Policy Group released a policy position paper on a Strategic Indigenous Reserve, after six years of extensive research and consultation. These reserves are an amount of water set aside in water allocation plans, to be used for Indigenous economic development purposes.

However, in October, the Northern Territory Government announced that Strategic Indigenous Reserves will be reviewed in three years' time. Traditional Owners for the Roper River catchment have serious concerns about the impacts of this policy, and they told the ABC that the Northern Territory Government's sudden interest in allowing licences for large amounts of water to be granted to a few proponents will leave them without the Strategic Indigenous Reserve needed for their future use and wellbeing.



Senior Mangarrayi Traditional Owner Sheila Conway with Ellen Reggie is interviewed by the ABC TV reporter about her concerns for water management.

# Water Rights Story

## captures media attention



A mango farm.



Filming at Roper Bar.



# Boat-based turtle & dugong monitoring



**A collaborative effort in the remote north Kimberley is drawing on extensive Indigenous Knowledge and state-of-the-art tools and technology to develop new ways to monitor marine turtles and dugongs along the remote northern coast of Australia.**

The Marine Turtle and Dugong Monitoring Project is an innovative research program involving the Wunumbal Gaambera Aboriginal Corporation's Unguu Rangers, NAILSMA and the CSIRO.

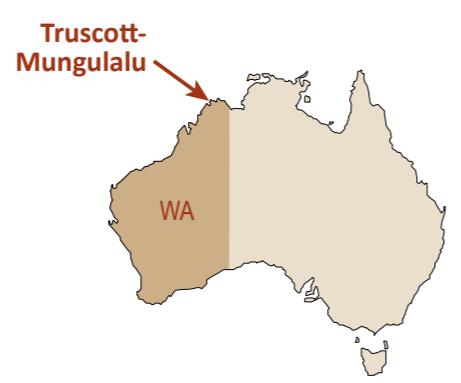
The project is developing tools that support scientifically robust, community-based biodiversity monitoring programs for the Indigenous rangers managing these culturally important species on their country. A key success of the project to date has been the development of a boat-based transect survey method that can be repeated in a rigorous way to monitor local turtle and dugong populations over time. The project also fosters partnerships that promote the development of sustainable Indigenous livelihoods based on caring for country.

Over nine days in August, members of the Unguu Rangers, other Traditional Owners, and NAILSMA and CSIRO staff camped out at Gaambermirri camp at Truscott-Mungulalu to complete a survey and sampling trip. At their disposal was *Deep Tempest*, a 17 m chartered vessel equipped with three tenders to assist them in their work, and a host of sophisticated equipment including unbreakable GPS units, a custom-built quadrat fitted with an underwater video camera, an array of water quality and core sampling gear, a metal grab sampler, and even a small blimp.

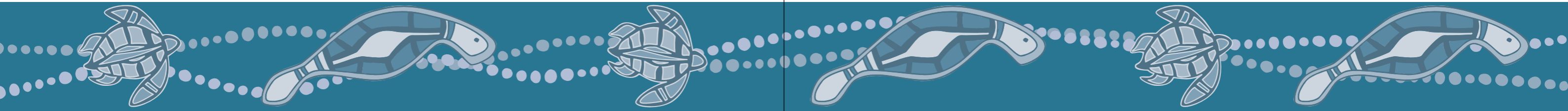
Data from more than 200 turtles were recorded during the boat-based surveys, using a customised data collection and mapping tool developed through NAILSMA's I-Tracker program. Sampling and species identification of seagrass were also completed, and a low-cost monitoring program for the richest sea grass areas proposed. In addition, valuable baseline data was collected with support from CSIRO to get an accurate picture of the water quality in the survey region and to examine changes in the sediment over time.

The data from these surveys support Traditional Owner aspirations articulated in the Unguu Healthy Country Plan, which documents the ten-year management and monitoring goals for Wunumbal Gaambera country. The plan includes a target specifically relating to maintaining healthy turtle and dugong populations.

The monitoring program is a case study within a larger body of research being carried out by Theme 5.1 of the Northern Australia hub of the National Environmental Research Program.



*Clockwise from above: Unguu Rangers using a grab sampler to examine seagrass and sediment. A small blimp fitted with a tiny camera was used to trial low-cost aerial photography. Unguu Rangers collect vital data on marine turtles.*



# Measuring mulga biomass

## at Lorna Glen

**Wildfire is a major land management issue in most of Australia. In the spinifex-dominated grasslands of the Western Desert, the fire regime is dominated by moderately frequent wildfires, mostly occurring in the summer. These fires are often large and intense, and their effects can be extensive.**

The Western Australia Department of Parks and Wildlife (DPaW; formerly the Department of Environment and Conservation) has been researching fire behaviour and impacts in remote arid landscapes for many years. During that time, they have formed strong working relationships with Martu Traditional Owners and Native Title holders in the Western Desert.

In October, the Martu Ranger team spent a week working at Lorna Glen, an ex-pastoral property in Martu country that is jointly managed by Martu people and DPaW. Together with staff from DPaW, NAILSMA, and the Kimberley Institute, the rangers prepared 33 previously excavated mulga trees to measure the mass of their above and below ground parts (their biomass).

The trip was part of a study looking at the carbon storage potential of spinifex and mulga country under traditional-style fire management. Because plants absorb carbon from the air, they affect atmospheric carbon levels while they are alive, and when they are burned. Under the appropriate fire regime, the fire-sensitive but long-lived mulga has the potential to store significant amounts of carbon in these landscapes.

Traditional-style patch burning can potentially reduce the amount of stored carbon released into the atmosphere by wildfires. The study partners are working to assess the feasibility of such a scheme in these landscapes, and a key step in this process is defining the best way to estimate biomass in mulga and spinifex, so that this can be calculated at the landscape scale.

Based on the data from this study, researchers have found that the measure of stem basal area at ground level is the single most reliable measure of total biomass. Knowing this will help researchers build models of tree biomass that allow them to estimate biomass from remotely-sensed imagery, which will contribute to the ability to quantify the amount of carbon stored in mulga trees in these landscapes.

This small but important step could ultimately help support traditional landowners reinvigorate their fire and land management practices with income generated through better carbon storage. If this feasibility study with Martu is positive it could lead to the development of a methodology to measure and account for carbon storage in mulga and spinifex landscapes. That may be some time off. For now, it's just one small step at a time.

**Neil Burrows and Mo Pawero  
DPaW and Central Desert  
Native Title Services/Martu Rangers**



*There was plenty of hard work getting the trees cut into manageable pieces, measured and weighed.*

**Below:** Excavating a mulga root. Mulga have a few long lateral roots, so a proportion of these (left in the ground when the trees were ripped out several weeks earlier) were dug up, measured and weighed, so a better estimate of total root mass could be calculated.



*Before weighing the tree all the soil was cleaned off the root system. This was then cut from the stem using a chainsaw.*

**Below:** The team of workers who prepared 33 previously excavated mulga trees to measure their biomass. (L-R) Bradley Wongawol, Jeremy Russell-Smith, Shane Wongawol, Paul Lane, Neil Burrows, Grant Bingham, Rowin Williams, Glenn James. Not shown: Mo Pawero.



*It wasn't all hard work. There was time to talk about what the science was all about and to swap a few funny stories around the billy – the one about the car driving through the camel's legs won't be forgotten for a while. And of course there's always time for a snack (yum, a nice perentie!).*





Dhimurru Aboriginal Corporation



Over the past eighteen months rangers from Dhimurru Aboriginal Corporation, and Parks and Wildlife Commission NT, have worked hard to reduce approximately three hectares of mature coffee bush to smaller areas so that regrowth and seedling development will be easier to control.

In April 2013 rangers controlled the ninth and last site of coffee bush on Dhambaliya (Bremer Island). The rangers also revisited four of the previously controlled sites with follow-up control.

In June 2013 the final coffee bush control activity was completed. Two Dhimurru Rangers and one Parks and Wildlife Ranger spent three days on Dhambaliya spraying regrowth and seedlings at the nine sites. This work was less intensive, as all of the mature plants had been cut and poisoned previously, therefore it required a much smaller team to do the work.

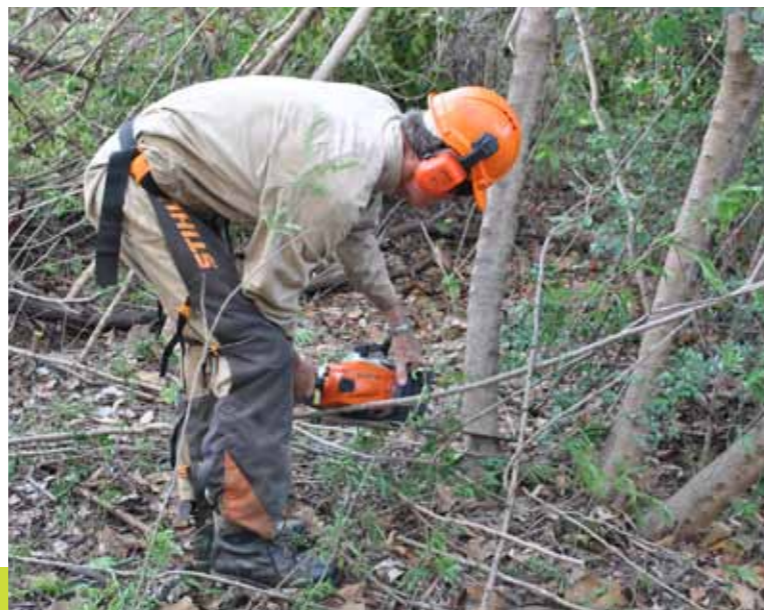
Coffee bush seeds can remain dormant in the ground for many years and ongoing monitoring and spraying of regrowth and seedlings will need to be undertaken for a number of years to ensure the coffee bush does not take hold again on the island.

The community has greatly appreciated the effort of the rangers in controlling the coffee bush infestations. The local community can see the impact the coffee bush has had on hunting areas and water holes and they look forward to seeing native plants returning to these areas.

The costly process of transporting rangers and resources (staff, vehicle and equipment) to the island would not have been possible without funding from TNRM and Caring for our Country Community Action Grants. This funding allowed Dhimurru to do six trips in total to control coffee bush on the island, between January 2012 and June 2013.

Dhimurru will continue to monitor and spray the regrowth and seedlings in the coming years, and is hopeful about obtaining future funding to continue the successful weed control program.

Dhimurru Aboriginal Corporation



Above: Parks and Wildlife Ranger John 'Stretch' Papple cutting coffee bush with a chainsaw. © Dhimurru Aboriginal Corporation

Top: Dhimurru Rangers Buduwutpuy Dhurrkay and Gathapura Mununggurr, Parks and Wildlife Ranger John 'Stretch' Papple and Dhimurru Ranger Daryl Lacey preparing to cut and swab coffee bush. © Dhimurru Aboriginal Corporation



On 2 October 2013, the Australian Government's Clean Energy Regulator held a Savanna Burning Workshop at Charles Darwin University. The aim of the workshop was to help land managers and their advisors understand the steps involved in the development and implementation of Carbon Farming Initiative (CFI) projects using the savanna burning methodology determinations.

The workshop started with an overview of the Carbon Farming Initiative, including details of how to implement a compliant savanna burning project. The Indigenous Land Corporation also gave a presentation about the successful Fish River project.

The workshop then moved on to a demonstration of the Savanna Burning Abatement Tool (SavBAT). The tool is available to registered CFI projects, and allows users to easily perform some of the geographic information systems (GIS) operations and calculations needed to complete their greenhouse gas abatement estimates.

The workshop concluded with discussions of the key steps groups will encounter in working with the Clean Energy Regulator, and presentations by three service providers who are currently working to assist Indigenous groups in engaging with the opportunities available through the CFI.

Andrew Plate, General Manager of Northern Indigenous Environmental Services (NIES), gave a presentation as part of these final sessions, where he highlighted NIES's commitment to promoting projects that generate environmental benefits, bring employment opportunities to remote communities, and strengthen caring for country practices. He also detailed the establishment of NIES, and in particular, the intrinsic partnership between the Indigenous Land Corporation, NAILSMA, and the NIES project team, which ensures that NIES is well positioned to assist Indigenous groups with CFI projects.

# SAVANNA BURNING WORKSHOP

# Looking to the FUTURE

**In early August 2013 the Miriwoong Traditional Owners (TOs) for the Keep River region held a 'back to country' trip to Thamberalm (Bubble Bubble Community) in the Northern Territory.**

Over twenty senior Traditional Owners and their families spent three days camping at the remote outstation with invited guests from NAILSMA, the NLC, Northern Territory Parks and Wildlife, Newry Station, Ngaliwurru-Wuli and James Cook University. The trip was facilitated by the Mirima Dawang Woorlab-gerring Language and Culture Centre (MDWg) with funding from Territory NRM.

Over the three days, the group held a number of meetings to discuss TO concerns and visited important cultural sites, some of which have suffered significant damage from fire in recent years. The group also discussed the need for the re-establishment of the Police Hole community as a permanent base for TOs to work from within the national park.

'We are very concerned; the cultural sites need protection, and we have the Traditional Knowledge to manage country, we just need to find funding to develop it into a Caring for Country Plan and then put it into action. We have the responsibility to look after country—we need to protect the Keep River region for our future generations', said Rita Boombi, Chairperson of the MDWg.

Miriwoong people have been working tirelessly looking after their country despite not being directly funded for caring for country activities in the Northern Territory over many years. They were active participants in NAILSMA's Indigenous Community Water Facilitator project, worked with the Bureau of Meteorology to develop the Miriwoong Seasonal Calendar, and recently worked with researchers to look at how Traditional Ecological Knowledge can help inform options for climate change adaptation and mitigation.

The meeting built on these and other successful projects of the MDWg in the Keep River region over the last 20 years, and aimed to establish new opportunities for partnerships with the region's stakeholders.

'We don't have any caring for country or ranger programs and our ability to look after country is limited to small activities with the language centre and casual work with Keep River National Park, but the time has come—we need a proper funded program like many other groups have', said Traditional Owner David Newry.



'Keeping culture alive' – Miriwoong youth dancing the Wangga at the Native Title settlement of the Keep River region in July 2011.

'Our recent attempts at gaining funding to undertake caring for country activities have not been successful', he explained. 'We are now looking at developing a cultural tourism business so we can fund our own presence on country...this is all we have, we will not give up, we can't give up, it is our children's future.'

The support of many stakeholders, including those who joined this trip, has been fundamental to the group's success. The future sustainability of Miriwoong livelihoods in the Northern Territory is dependent on a commitment by government to fund and support the five communities that exist within the Keep River region. As Traditional Owner Button Jones explained, 'We want our young people to live out here, work out here, look after this country....many of these kids lived out here as babies but now we are in town as there is no funding to have a ranger program or run these houses'.

More information on the great work of the MDWg and Miriwoong people of the Northern Territory can be found at [www.mirima.org.au](http://www.mirima.org.au)

**Sonia Leonard, Mirima Dawang Woorlab-gerring Language and Culture Centre**

**Far left:** Miriwoong Traditional Owners meeting at Thamberalm August 2013.

**Left:** Agnes Armstrong teaching the Miriwoong names for the different parts of garrijang (waterlily) at Thamberalm Billabong.

## Recommendations

**Miriwoong people put forward seven objectives as recommendations for a sustainable future:**

- 1 Develop joint management of Keep River National Park;
- 2 Develop a Caring for Country Plan that outlines a pathway to work with stakeholders to manage the Keep River Region;
- 3 Establish an Aboriginal ranger program to work with national parks and surrounding pastoral stations;
- 4 Improve infrastructure of community outstations within the Keep River region;
- 5 Establish Police Hole Community as a Cultural Centre;
- 6 Develop a cultural tourism venture to operate within Keep River National Park; and
- 7 Develop a climate monitoring program based on the TEK of the Miriwoong seasonal calendar that works hand in hand with western science.

# NAILSMA Board visit to ORD Stage 2

In July 2013, Directors of the NAILSMA Board travelled to the east Kimberley to tour some of the Ord River Irrigation Scheme Stage 2 construction area, and hear about the impacts of the project from Miriwung and Gajerrong Traditional Owners.

The Ord River scheme is an example of the kind of development that is being considered in other sites across north Australia.

The issues raised during the visit were consistent with concerns voiced by Indigenous people across the north, and echoed many of the statements agreed at the North Australian Indigenous Experts Forum on Sustainable Economic Development. These include the challenges and pressures of negotiation processes, the fundamental requirement for increased consideration of the aspirations of Traditional Owners, and the importance of maintaining connections between people, land and water.

The visit reiterated the view that Traditional Owners are not necessarily opposed to development on their country, but are instead seeking upfront and fuller participation in planning and decision making. This will shape better outcomes and ensure that considerations beyond just the financial are factored into what development should take place and what returns are going to be generated for Indigenous people, who are the majority local residents of the region.

Ultimately, projects like the Ord River scheme highlight the challenges of development in the north, where benefits often remain uncertain and are not always realised locally, while potentially significant impacts on a range of environmental and cultural values necessitate strong consultation processes and a culture of mutual engagement and respect.



Edna O'Malley, Teddy Carlton, Jian Zhong Yin, Joe Morrison, Jim Enklge, Guy Fitzhardinge and Angela Shima.

## STUDY TOUR...

Representatives from Rote Island (Indonesia) and Timor-Leste visited Darwin and eastern Arnhem Land in October to meet with Indigenous groups, environmental managers and conservation professionals. Together they shared knowledge, skills and experiences related to coastal and marine management, livelihoods and biodiversity conservation.

Hosted by CDU and NAILSMA, the study tour was conducted as part of the Arafura and Timor Seas Ecosystem Action regional exchange program with funding support from the Global Environment Facility International Waters Program and the Australian Government Department of the Environment. NAILSMA has been involved in this program since 2002.

Three days of the five day workshop were spent visiting the Dhimurru Rangers and Yirralka Rangers in north-east Arnhem Land, where the hosts and participants shared their experiences and ideas on community-based resource management. The Dhimurru Rangers welcomed the group at Nhulun and took the visitors to Wurrurrwuy to visit the Garanhan (Macassan Beach) Stone Pictures. The stone arrangements were made by Yolngu toward the end of the nineteenth century so that future generations of Yolngu would know the history of the Macassan visits.

The following day the Yirralka Rangers took the visitors to Garrthalala, a homeland that is located in the Laynhapuy Indigenous Protected Area about 160 km south of Yirralka. The Indonesian and Timorese participants viewed freshwater areas affected by feral buffalo and discussed management plans for the control of buffalo with the rangers. They also had a chance to see some of the land and sea country of the area, travelling by either boat or troopy for the trip.

During the workshop the visitors were introduced to the NAILSMA I-Tracker program and its use by Indigenous rangers to monitor biodiversity and track ghost nets around coastal areas. They were also given a demonstration of some of the I-Tracker applications while at Garrthalala.

The participants and their Indigenous hosts spoke at length about their common interest in trepang aquaculture enterprises, which are being trialled in some north Australian Indigenous communities. They were also very interested to share and compare their experiences in the recognition of land rights that underpin the management of their own resources, and their ideas about traditional and customary community-based management.

## LINKS ARAFURA AND TIMOR SEAS



Clockwise from above: ATSEA Study Tour participants are welcomed to country by Dhimurru staff on Nhulun Hill. Some of the Indonesian and Timorese visitors travelled by boat from Yirralka to Garrthalala. Dhimurru staff show the visitors around the Garanhan (Macassan Beach) Stone Pictures.





# CANE TOAD BUSTING

## with the Crocodile Islands Rangers

**The Crocodile Islands Rangers, with the help of the local community, have been mounting a targeted attack on cane toads across Milingimbi Island, with over 3000 toads collected in just three nights.**

We all know that cane toads are a menace and are responsible for wildlife declines across Australia. With the ever encroaching wave of cane toads, few parts of Australia's Top End remain toad-free. However, if the Crocodile Islands Rangers have their way, their home—the Crocodile Islands—may become one of our country's few northern habitats free of cane toads.

The Crocodile Islands consist of over 20 islands located between Maningrida and Elcho Island. The main island, Milingimbi (Yurrwi), has a population of about 1200 people, and unfortunately is also home to many cane toads.

There are various stories of how the cane toads came to Milingimbi. Some believe they were brought here from the adjacent mainland community at Ramingining, to show the Milingimbi community this new curiosity. Others say they came over as stowaways on barges. Yet another explanation is that they were washed over here during wet season runoff from the mainland. Although cane toads can't survive in salt water, during a big wet season the large

plumes of fresh water sit on top of the salt water, so it's possible the toads could have survived the journey to Milingimbi.

Since the toads first made it to Milingimbi over 10 years ago, their impact has been devastating, and numbers of native frogs, goannas and snakes have plummeted. Last year, the rangers found a goanna on Milingimbi, and some locals said it was the first one they had seen here in years.

### So what are the rangers doing about this?

The rangers recently gave a presentation at Milingimbi School to inform and educate the community about cane toads, the importance of not transporting toads to other islands, and what to do when a toad is spotted. Following this, during the September school holidays the rangers coordinated a community cane toad bust, with generous prizes donated by the Arnhem Land Progress Aboriginal Corporation and the Crocodile Islands Rangers. The family that won the major prize collected over 400 toads in just three nights!

Cane toads need to drink water every five days or so, and Milingimbi has only a few sources of fresh water during the dry season. For the second year running, the rangers have built toad-proof fences (complete with native animal gates) around these major freshwater sources, and have been patrolling these at night to collect the toads that gather at the fences.

Another source of fresh water for the toads is running or leaking taps and air conditioners, and the rangers followed up the cane toad bust with numerous night patrols through the town to collect any cane toads that were drawn to these sources. The rangers are hoping to continue to work with Power and Water to combat this issue.

The rangers have also been building cane toad traps, which they plan to use for future cane toad activities.

The rangers conduct monitoring for cane toads on the other Crocodile Islands as well. There has been the odd report of a dead toad washed up on a beach, but to the best of their knowledge most of the Crocodile Islands are still free of cane toads, and the rangers are doing their best to try to keep it that way.

A final tally of the toads collected this dry season is still ongoing, however the rangers and community have already collected well over 4000 toads, demonstrating the commitment of the community and the rangers to this valuable project. Although it will take several years to fully develop a methodology to wipe out cane toads from Milingimbi Island, the number of toads removed this dry season will ensure less toads during the next wet season, which will help native frogs and other wildlife.

**Simone McMonigal, Program Coordinator,  
Crocodile Islands Rangers**



*Clockwise from above: Ranger Fabian catching a cane toad during the cane toad bust activities.*

*The rangers have constructed a temporary toad-proof fence around the main billabong.*

*Ranger Fabian collecting a cane toad from one of the toad-proof fences.*



# Sea Country added to Dhimurru IPA



**In early 2013, Yolngu in north-east Arnhem Land announced the dedication of over 450,000 ha of sea country surrounding the Gove Peninsula for inclusion in the Dhimurru Indigenous Protected Area (IPA).**

The dedication sets the stage for Yolngu to work together with government agencies and commercial and recreational fishers, to look after the marine environment and resources as a Collaborative Management Zone within the Dhimurru IPA.

Wurrulnga Marika, Dhimurru Aboriginal Corporation's Managing Director and a senior leader of the Rirratjingu clan, made the following statement during the dedication ceremony held in March at Yirrkala.

'We are dedicating our Manbuynga ga Rulyapa, our sea country, as part of the Dhimurru IPA. This announcement honours our leaders' and elders' vision of a unified land and sea protected area. It is hoped that ultimately these initiatives will help all of us to look after sea country sustainably. Dhimurru's founders' vision is to ensure that the IPA will be managed such that Yolngu and Ngapaki (non-Aboriginal people) will be able to enjoy and use their country in the future just as they do today.'

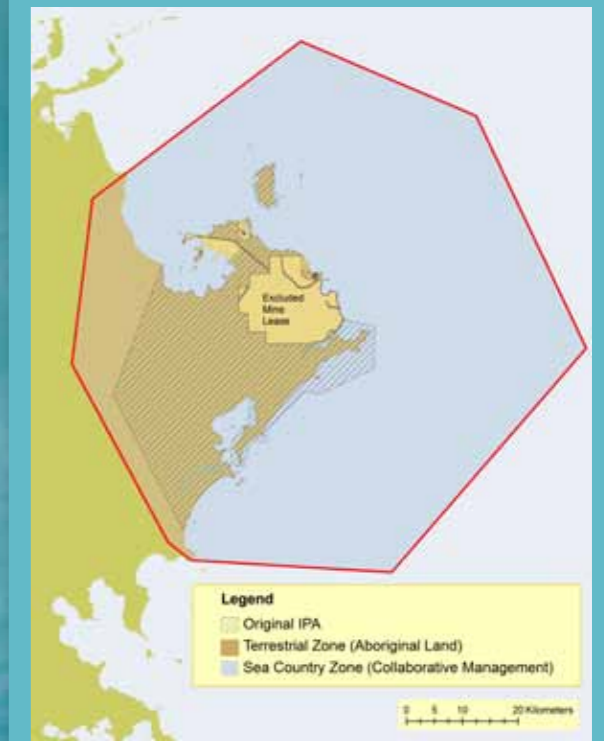
The Dhimurru IPA Sea Country Management Plan was launched at the World Indigenous Network (WIN) Conference in Darwin in May 2013. The plan explains that the IPA dedication has established a forum for all interested

parties to better understand and protect the cultural and natural values of the area, and ensure the sustainable Indigenous, commercial and recreational use of marine resources.

The IPA dedication over sea country is a non-legal process that does not impact on the government agencies' authority, fisheries licences, access rights or native title rights. Any changes to current arrangements would occur through negotiation and agreement under existing legislation and policies.

The Dhimurru IPA included coastal and island marine areas registered as sacred sites when it was first established in 2000. The dedication of this additional marine area as part of the Dhimurru IPA is not only another significant step in recognising and supporting Traditional Owners' connections and responsibilities to land and sea country, but it provides a new model for collaborative marine management led by Indigenous groups that have maintained and sustainably used their sea country for millennia.

Yolngu leaders and Dhimurru Aboriginal Corporation are proud to have achieved this new milestone in the development of IPAs in Australia and are pleased to acknowledge and thank the Northern Territory Government, the Australian Government and fisheries organisations for their support.



Map showing the Dhimurru IPA including the Sea Country Zone. © Dhimurru Aboriginal Corporation

**Dhimurru Aboriginal Corporation**



**Above:** The launch of the Dhimurru IPA Sea Country Management Plan at the WIN Conference in Darwin May 2013. © Dhimurru Aboriginal Corporation

**Left:** (L to R) Dhimurru Chairman Winimbu Mununggirritj, Gatha Mununggurr and Rod Kennett at the launch of the Dhimurru IPA Sea Country Management Plan at the WIN Conference in Darwin May 2013. © Dhimurru Aboriginal Corporation

# TRACKING FISHERIES in Costa Rica

In October 2013, I had the opportunity to travel to Darwin to learn more about the I-Tracker program. The trip was a great opportunity to network with people working on Indigenous land and sea management, who share similar efforts and interests as well as a commitment to conservation, local empowerment, research, and social development.

I work with Biocenosis Marina (BIOMA), which focuses on research, community development and conservation initiatives in Costa Rica's coastal and marine environments. Some of our initiatives include sea turtle conservation, artisanal responsible fisheries, coastal community development and oceanographic research.

I first learned of NAILSMA in 2010, when I attended the 30<sup>th</sup> International Sea Turtle Symposium in Goa, India, and saw a presentation from Rod Kennett. He talked about the I-Tracker program, and that got me interested in learning more about how the program empowers local people to do their own data collection and resource management.

In Costa Rica, research is often done by people from outside the community, and there is usually little local involvement. Research organisations and universities come and go from communities, and generally take with them all of the important environmental data they have collected. In most cases this leaves people with no access to the data they need to develop good local management, monitoring, and evaluation practices.

There is a real need to strengthen the tools and processes for collaborating with and involving local people. Our organisation has made vital advances in this area, but we are always looking for new tools and ideas to link to our programs and processes.

The I-Tracker program is an exciting direction, because it incorporates the collection of high quality data with local knowledge, and brings them both together to create a strong information base to inform local management decisions. The success of the program with ranger groups across north Australia also proves that highly technical documentation can be taken by people who don't have a specialised academic degree, but who hold the motivation to accomplish the task.

Now that we know more about how the program has been developed and implemented, we will be working towards a trial of our own application. This will integrate with work we are currently engaged in, researching small-scale traditional fishing techniques, target species and habitat importance, as well as the fishing culture, directly with those individuals who depend on the sea for their livelihoods. Our hope is that we can build applications that will help local people monitor and manage the areas they declare as 'Responsible Fishing Areas', and also give them the tools they need to analyse, evaluate, and set management plans.

For more information visit:  
[www.biocenosismarina.org](http://www.biocenosismarina.org)

**Wagner Quirós,**  
Biocenosis Marina



Santiago, a fisherman from the San Juanillo Fisherman Association. This group will be the first to trial the application we are developing.



A local fisherman releasing a turtle from a fishing line in the water.



Meeting with the Larrakia Rangers in Darwin was a valuable chance to share perspectives and stories about the common challenges we face in Indigenous land and sea management.

# JOURNEY TO RECOGNITION



Supporters gather for the Journey to Recognition at the George Brown Botanic Gardens in Darwin.

In September 2013, hundreds of local people gathered in the George Brown Botanic Gardens in Darwin to join the call for Aboriginal and Torres Strait Islander people to be formally recognised in the Australian Constitution.

The event was part of the Journey to Recognition, a relay across Australia that aims to build momentum for the Recognise movement. This journey has involved people from all states and territories walking, cycling and driving across the nation, holding local events in hundreds of locations along the way.

NAILSMA staff attended the event to show their support and learn more about the Recognise movement.

Larrakia elder June Mills welcomed guests to Larrakia country, saying, 'The land is alive and as we speak the land is listening.'

The campaign director of Recognise, Tim Gartrille, explained that because it is difficult to change the Constitution, a referendum is needed so that Australians can finally have their say. He also highlighted the fact that many people do not realise that the Constitution excludes Indigenous people. He told the audience that it is important that the majority of Australians demonstrate they understand and support the changes before the government can introduce a referendum.

Tim encouraged people to talk to their family and friends about the movement so that the Australian Constitution could ultimately be corrected to remove discriminatory clauses and recognise Aboriginal and Torres Strait Islander people as the first peoples of this nation.

For further information and to sign up to show your support visit [www.recognise.org.au](http://www.recognise.org.au)



NAILSMA staff members attended the event to show their support.

# LEARNING on Country

The Yolngu and Bininj children of Arnhem Land are the future owners and managers of their land and sea. In time they will become the custodians of a rich tradition of songs, art and knowledge about their estates. Rangers have a proud history of supporting children to prepare for this responsibility.

Four ranger groups have dramatically expanded their commitment to supporting the education of Indigenous school children. The Dhimurru, Djelk, Gumurr Mathakal and Yirrkala Rangers have entered formal partnerships with their community schools to deliver a 'Learning on Country' program. The Anindilyakwa Land and Sea Managers on Groote Eylandt plan to have their Learning on Country school partnership in place by the end of the year.

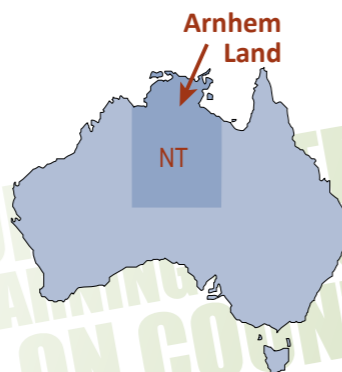
The Learning on Country program aims to improve school attendance and completion, improve the opportunities for students to create a satisfying and rewarding career in their community or elsewhere in Australia, and prepare the next generation of Yolngu and Bininj landowners to care for their estates which are of national and international significance.

Children participating in the Learning on Country program begin their journey on country under instruction from Yolngu and Bininj experts, rangers, vocational education trainers and school teachers. Each event is followed up with regular classroom teaching, where aspects of

country are used as inspiration and a resource for student development, learning and academic achievement.

Each of the schools in this Learning on Country initiative has demonstrated that Indigenous country, knowledge and traditions of caring for country are a rich source of inspiration, rigour and direction in teaching and learning. This use of Indigenous traditions as a foundation for achieving national educational standards is known as a 'both-ways' education, an approach championed by the late Dr M Yunupingu, a former Yirrkala School Principal and educational scholar. The Learning on Country initiative builds on this legacy.

*The Learning on Country initiative is supported by the Australian Government's Indigenous Ranger Cadetship Program and the Northern Territory Department of Education.*



**Jonathan Wearne,**  
Learning on Country  
Coordinator  
(Yirrkala School  
and Dhimurru)



**Yirrkala - led by Yirrkala School and the Dhimurru Rangers**

*Yirrkala School –  
Jonathan Wearne, 0417 431 702*

*Dhimurru Rangers Djambatj Pearson and Buduwutpuy Dhurrkay running a class on workplace safety for senior students at Yirrkala School studying Certificate II in Conservation and Land Management. Photo: Jonathan Wearne*



**Laynhapuy Homelands - led by Yirrkala Homelands School and the Yirrkala Rangers**

*Yirrkala Homelands School –  
Stuart Kellaway, (08) 8939 1857*

*Yirrkala Senior Ranger leading a presentation to students on field survey of dolphins. Photo: Stuart Kellaway*



**Maningrida - led by Maningrida College and the Djelk Rangers**

*Maningrida College –  
Shane Bailey, 0458 584 477*

*Maningrida College Learning on Country Senior students, Kathy Champion and Noeline Galarla, about to undertake a helicopter survey with Djelk Rangers to assess feral animal damage to important waterholes.*



**Galiwinku - led by Shepherdson College and the Gumurr Marthakal Rangers**

*Shepherdson College –  
Gavin Enever, (08) 8987 9044*

*A Gumurr Marthakal Ranger showing a Learning on Country student how to weld and fabricate a feral pig trap. Photo: Gavin Enever*

# LAMA LAMA WETLANDS

In June 2013, I-Tracker Officer Christy Davies and South Cape York Catchments Manager Jason Carroll joined the Lama Lama Rangers at Lilyvale Station to check on the health of wetlands in Lama Lama National Park (CYPAL) and Running Creek Nature Refuge.

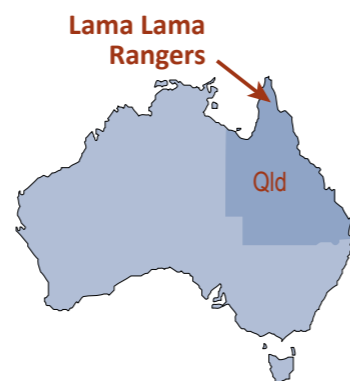
The main aim of this trip was to repeat the condition assessments carried out in 2009 and 2010 using the Cape York Freshwater Wetland Assessment (CYFWA) methodology developed by Cape York Marine Advisory Group Environmental Inc.

Condition assessments yield data that are essential to the land management planning and activities of the Lama Lama Rangers. Pigs, for instance, are one of the most significant threats to wetlands on Lama Lama country. They dig up the damp soil around the edges of the swamp, looking for roots, tubers and bulbs of plants, freshwater mussels, turtles and their eggs, and even frogs. As the water recedes over the dry season, the pigs move inward with the shrinking wetland edge, leaving stretches of damage through the entire area. Thirsty cattle and horses often make matters worse: when they waded into the deeper water, they make the water muddy and increase evaporation and infiltration rates so that the waterholes dry up faster than they would in the absence of these introduced animals.

The Lama Lama Rangers are making significant efforts to reduce these impacts, and the assessments help them prioritise and target those efforts. Land managers have

been working to reduce pig numbers on Lama Lama country by baiting and aerial shooting, and the rangers have been working hard over the last few years to offer key wetlands an extra level of protection by fencing out the pigs and other introduced animals. Bassani Swamp, for example, was fenced in the dry season of 2010 after the CYFWA found it to be in poor condition, with a score 41/100.

For this trip, Goose Swamp was first on the list of sites to visit, and a high priority because the rangers are planning to fence it. The group split into teams that worked on different monitoring and assessment tasks. The first team located the four monitoring points used previously, marked them with star pickets and collected information as part of an existing photopoint monitoring project. The second group undertook the survey work, which considered several different aspects of aquatic ecosystems that are important to understanding how healthy a wetland is, including random sampling of feral animal impacts and bank stability.



## get a health check-up

The teams assessed several other wetlands in the same way, including Bassani, Scrubby, Beach and Bull Swamps. Naturalist Keith McDonald was also present, working with the rangers to carry out a baseline botanical survey of the terrestrial plant life of the region.

This trip was part of a larger collaborative research project involving the Lama Lama Rangers, NAILSMA, South Cape York Catchments and Griffith University, with funding support from the northern hub of the Australian Government's National Environmental Research Program.

The team is also working to develop a rapid assessment tool from the existing CYFWA methodology, and NAILSMA will create a customised I-Tracker application to capture and manage the data. The full methodology is quite complex and is intended to be applied once every 5 to 10 years. The rapid assessment will complement the CYFWA methodology, giving rangers a tool that is simple enough to be conducted once or twice a year. This will allow the rangers to keep a close eye on the progress of any changes to wetland condition, particularly in response to on-ground management actions.

*Clockwise from top right: Lama Lama Rangers learn how to do the assessments.*

*While most of the wetland was in very good condition, one corner of Bull Swamp had a very high level of pig disturbance. Goose Swamp was in relatively good condition overall, with only small patches of pig disturbance.*



# marine debris:

## where does it come from?

Marine debris is pollution that affects almost every waterway, beach and ocean around the world, but when we start to look at what marine debris is actually made from and where it comes from, there's not just one simple answer or solution.

That's what inspired Tangaroa Blue Foundation to launch the Australian Marine Debris Initiative (AMDI), and with the help and support of over 50 Indigenous communities, school groups and Land and Sea Ranger teams, we've started to create a detailed picture of the types and sources of marine debris across northern Australia.

While it is difficult to estimate the total amount, accumulation rates and replenishing frequency of marine debris, there is a good understanding of the origin, volume and composition of waste across the region, particularly in Cape York and the Torres Strait Islands where data has been regularly collected from over 40 clean-up sites.

In some remote areas, the vast majority of marine debris recorded is sea-based waste (up to 90%). It arrives onto the coastline from the ocean rather than from local sources such as campsites or tips, and a large proportion of this rubbish originates from foreign areas. Many marine debris items are easily identified from appearance and labels, and much of the waste found has travelled from nearby countries such as Papua New Guinea, Indonesia and other parts of south-east Asia.

In areas closer to towns, the amount of sea-based waste is lower (usually around 60-70%) with a higher proportion coming from land-based rubbish (litter). In total, the AMDI data indicates that quantities of marine debris in remote locations can be as high as 3000 kg of waste per kilometre, but are typically around 65 kg/km when averaged across the region.

So if marine debris is coming from different countries, what can we do about it? Data shows that most clean-up sites have some marine debris coming from a local source. So we encourage communities to look at creating a local Source Reduction Plan, to reduce this local marine debris. Then by contributing data from clean-up events to Tangaroa Blue Foundation, communities are assisting in showing the extent to which marine debris from other locations is impacting northern Australia. This data is included in reports that are used to engage with government agencies and industries to create Source Reduction Plans based on state, federal and international levels, which result in cleaner beaches everywhere.

Thanks to all of our partners across Australia, the AMDI Database now holds more than 2 million pieces of data from over 960 sites across the country. If you are interested in finding out more about the Australian Marine Debris Initiative, contact Heidi Taylor at [info@tangaroablue.org](mailto:info@tangaroablue.org) or visit the website: [www.tangaroablue.org](http://www.tangaroablue.org)

**Heidi Taylor**  
Tangaroa Blue Foundation



The Mapoon Land and Sea Rangers get a hand from a Conservation Volunteers Australia team to clean up over 11 km of Back Beach in June 2013. Data showed that more than 85% of the debris came from south-east Asia, including an extraordinary 7154 thongs. Photo: J. Goldberg/GhostNets Australia



## Coastal Stewardship Network gathering

In June 2013, acting I-Tracker Program Manager Micha Jackson worked to strengthen ties and share experience and knowledge with First Nations land and sea managers in British Columbia, Canada.

The territories of coastal First Nations in Canada have been impacted by past resource use and continue to be threatened by ongoing activities and planned development. First Nations are working together to improve ecological and human wellbeing and re-establish their authority to manage and protect their territories.

The Coastal Guardian Watchmen play a critical role in monitoring and protecting cultural sites and important ecosystems. They are the eyes and ears in each coastal First Nation's territory. Guardian Watchmen work in various stewardship roles, including fisheries, protected areas, and environmental compliance.

Representatives of the Coastal Stewardship Network and associated Coastal Guardian Watchmen have attended two previous I-Tracker forums held at Mary River. They have developed a program they have named 'CoastTracker', that uses CyberTracker software (just like the I-Tracker program) to assist with data collection for their coastal monitoring activities.

Micha's visit coincided with the Coastal Stewardship Network Annual Gathering, held at Hakai Beach Institute, a truly unique place accessible only by boat or sea plane. Stewardship staff from seven First Nations attended the gathering.

At the conference, Micha delivered a keynote talk providing an overview of I-Tracker and the work being done by Indigenous land and sea managers in Australia. A wooden carving from Buku-Larrnggay Mulka Arts Centre at Yirrkala was presented to representatives of each of the First Nations at the gathering, on behalf of NAILSMA and Indigenous ranger groups who have developed links and friendships with the Canadians who have visited over the years.

Activities during the conference included hands-on workshops, such as training on conducting beach surveys to monitor marine debris that could turn up on Canada's shores as the result of the tsunami that hit Japan in 2011. Other key sessions included a review of the Regional Monitoring System (the system that the CoastTracker data feed into), discussions around conservation planning, and role-playing scenarios on investigating offenses in protected areas.

Following the gathering, Micha spent time with Coastal Stewardship Network and partner organisation staff in Vancouver. The time was spent exchanging expertise and technical knowledge on CyberTracker as well as exploring opportunities for further development of the partnership.

# I-Tracker

mapping & data service



The growing role of Indigenous rangers as front-line managers of north Australia means they need access to the latest biophysical data about their lands and seas.

The I-Tracker mapping and data service has been set up to assist Indigenous land and sea managers access this data, which is often held by government and non-government, statutory, and research organisations.

NAILSMA's I-Tracker program uses applications built with CyberTracker software. The software allows the addition and integration of other images (backgrounds) and data layers (sites, lines and areas) to maps.

However, extra maps and data are not always easy to find, access or obtain, even though a great deal of data is freely available to download via the internet. The I-Tracker mapping and data service helps rangers do this by stepping them through the process and assisting them to find maps and data relevant to the work they are doing on country.

### The I-Tracker mapping and data service:

- provides advice and access to available spatial data sets;
- prepares data for use (e.g. extracting relevant information from a data set);
- converts data so it can be imported into CyberTracker;
- provides advice and training on how to integrate patrol data with other data layers and maps;
- helps rangers access base data for matters of national and international environmental significance;
- assists in developing reports; and
- assists in uploading data to government databases.

For more information on this service, please contact our officers by phone or email or visit our website: [www.nailsma.org.au/i-tracker/mapping-and-data-service](http://www.nailsma.org.au/i-tracker/mapping-and-data-service)



# Yirralka Miyalk Rangers Bush Harvest Business



**Clockwise from above:** Yirralka Miyalk Ranger Nirrkulnga Mununggurr applying labels to the finished bush product ready for market. Yalmakany Marika preparing product leaf for bush soaps. Yanipuy Carol Mununggurr displaying the packaged bush products ready for sale.

Yirralka Miyalk Rangers (L-R) Nymburr Mununggurr, Nirrkulnga Mununggurr, Gunhir Ganambarr, Bulbuyunawuy Dhamarrandji, Gurrundul Marika and Gurrundul Marawili are preparing the still to extract melaleuca oil.

**Since 2011, the Yirralka Miyalk (Women) Rangers have been developing a bush products enterprise consisting of the production of personal care products and essential oils.**

This has been made possible through the local knowledge of the rangers and community members, and their involvement in various forms of training workshops with Aboriginal Bush Traders (ABT). The workshops have built skills in all aspects of bush product development, from product making, product development and researching to business management and marketing. This has given the Miyalk Rangers an opportunity to learn valuable skills in business development and sustainable use of their natural resources.

The Miyalk Rangers harvest specific plant species, fruit and seeds to make their bush products. Native plants have many varied uses, whether for cooking or art materials, as food, for body products or for medicinal purposes. Traditional knowledge determines how the plants are used and for what purpose.

The Yolngu seasonal calendar identifies when plants are ready to be harvested and other environmental indicators, such as the timing of various hunting seasons. The Miyalk Rangers record information about the various plants they harvest including the status of plant communities and harvest times. The Yirralka Rangers are working with NAILSMA to assist in the collection of this information through the I-Tracker Program.

To date, the rangers have made and sold salt scrubs, soaps, bush rubs and lip balms at various festivals and markets across the NT including the GARMA Festival and Nhulunbuy and Darwin markets.

For more information about purchasing products please call the Yirralka Rangers Office on 08 8939 1850.

**Yirralka Miyalk Rangers**

**Above:** The Ganybu traditional fishing trap or net was used to trap Gangal (freshwater catfish). The old people chose the Ganybu to be the logo for Laynhapuy Homelands Aboriginal Corporation to catch good decent people – both indigenous and non-indigenous to work together as one towards the vision for Homelands.





Mapoon Cultural Heritage Rangers Ronaldo Guivarra and Diane Nicholls with the Mapoon Country Plan.

**The Mapoon Country Plan was developed over a period of 18 months when elders, representatives from the six clan groups and people with a shared history in the Mapoon area came together with rangers and external facilitators to develop the document.**

Supported by the Healthy Country Planning process (thanks to The Nature Conservancy and Bush Heritage for training workshops and support), the plan sets out the priorities for managing country for the next seven years.

A vision provides the overarching direction that guides the plan. The vision begins with the aspiration:

*Caring for all of our Land and Sea Country through our Old Peoples' Way using customary laws, science and legislation.*

The area over which the plan applies uses peoples' traditional connection to land rather than tenures.

Nine priority targets were identified by a working group formed specifically to develop the plan. These targets set specific goals in key areas that are important to the community. Seasonality, culture and country are the overarching themes throughout the targets. The plan also identifies the threats to each of the targets that could impede successful realisation of the vision.

Out of the planning process emerged a strong reflection of the intersection between cultural and land management work. This also spurred the establishment of a unit of the Mapoon ranger program specifically dedicated to cultural heritage work.

The overall ranger work program for Mapoon will now be guided by the priorities articulated in the plan. One of the identified targets in the plan is Historical Places. This led the Mapoon Rangers to assist in creating a First Contact Memorial site, develop an interpretive walk for the Old Mapoon Mission site and collaborate with international researchers to assist elders to locate and mark burial sites without disturbance.

The inclusion of cultural targets has balanced the ranger work program. Natural resource targets include beaches, water (fresh and salt) and bush country, and include such activities as fire management, visitor management, plant and animal surveys, wetlands monitoring and country patrols. The plan now provides strong internal direction to the land and sea program to link its goals and outcomes to the priorities of Traditional Owners through the vision articulated by the plan.

Mapoon Rangers



Mapoon Land and Sea and Cultural Heritage Rangers  
Mapoon Aboriginal Shire Council

# PLANNING FOR THE FUTURE...

## *learning from the past*

Bringing together a diverse range of groups to participate in a weeklong workshop can take some organising. Not only can it be logistically challenging but for many it means leaving behind their families and familiar surroundings.

developing plans, often in language. The end result is the development of a shared plan and vision for country about which the community is justifiably proud.

So what makes participating in the Healthy Country Planning (HCP) workshops so appealing for Indigenous communities around the country?

Once completed these plans are used for a range of things. The plans can form the basis for the declaration of an Indigenous Protected Area, provide a clear direction for an indigenous community, help better manage indigenous lands, enable the effective implementation of projects such as fire and feral animals or weed control, and can be used to inform funding requests and on-ground support for rangers.

The Nature Conservancy's HCP workshops are based on Open Standards for the Practice of Conservation which is a successful framework for conservation action used around the world.

Feedback from participants about the HCP workshops has been overwhelmingly positive and an added benefit has resulted from bringing a number of different groups together at the same time. It's a chance to see how other groups are facing similar challenges in managing their land and sea country and to swap ideas, stories and experiences.

The teams come together for two workshops during which they learn the planning process by applying it to relevant real world projects back on their own country. They are taken through activities which help them to imagine the future by recognising the past. Through this process they define all of the important issues about their country and how they want to manage them. The end result is a shared vision for their community and their country.

The Guidelines for Indigenous Protected Area Management Plans developed by the Indigenous Protected Area Program also recommend this approach as a potential framework to assist groups in developing their plans for country.

The first workshop works through a range of topics including deciding what the plan is about; identifying the area the plan applies to and how groups imagine they want the future to look; and recognising the important things on country, the threats to these and how they need to be managed.

In its third year of implementation, The Nature Conservancy's HCP workshops are funded by the Anne Ray Charitable Trust. A new workshop is being planned for 2014 which focuses on implementing, monitoring, adapting and sharing the groups' learning.

The second workshop brings the teams back together to build on discussions from the earlier workshop and helps them to develop their goals and objectives as well as their actions and monitoring plans.

By developing the skills of people from across northern Australia in this way, we hope to support strong, healthy country across Australia's north.

Most teams go back to their communities and work with their elders, rangers and other community members to develop their plans for country—plans by the people, for the people. Importantly this provides the opportunity for deep consultation with the community, but also for

*If you would like to be involved in future HCP workshops please contact The Nature Conservancy on (03) 8346 8600.*

Jacqueline Novoselac and Natalie Holland  
The Nature Conservancy



Participants in the April 2013 Health Country Planning Training workshop.





Gavin Bassani (front) and Peter Liddy (back) on board Marrpa Chaos.



Peter Liddy and Isabel Beasley, documenting survey results.



Species mapping with Helen Penrose and Isabel Beasley.

# INSHORE

## KICKS OFF

The Lama Lama Rangers have commenced a program of training and surveys to collect information about inshore dolphins in Lama Lama sea country.

In February, we had dolphin identification training with James Cook University (JCU) researchers Helen Penrose and Isabel Beasley. The training we received was to introduce us to the different species of inshore dolphins and dugongs, to help with identifying them in the field.

In May, as part of our Cultural Heritage Activity, rangers and community members travelled to Yalawonga with Helen Penrose (JCU) and Andrew Simmonds (GBRMPA). In transit, Cheryl Prestipino (Lama Lama) and Helen talked with the group about developing a formal partnership with JCU, and introduced a sea country mapping exercise. The exercise aimed to capture our knowledge of different species we see in Lama Lama waters. We placed stickers onto satellite maps to show where we see certain species like dolphins, turtles, dugongs, seagrasses, mangroves, sawfish and crocodiles.

In September, we held our first survey activity, again with Andrew Simmonds, Helen Penrose and Isabel Beasley, who were joined by Shane Preston from JCU. The goal was to locate inshore dolphins and dugongs in Lama Lama waters and record details. This was also the first formal activity in Lama Lama waters for our vessel *Marrpa Chaos*, and we included time to test our safety policy and procedures in the field.

On the trip, Lama Lama Rangers and interested people participated in surveys from Port Stewart and Marina Plains. This was the first dolphin survey trip to this area, and unfortunately we had bad weather that cut the trip short. However, although high winds made it difficult to survey the coastal area, we were able to survey the rivers. Together we found that the North Kennedy River is an important habitat for the Indo-Pacific humpback dolphin, which is one of our priority research species of dolphins.

The team is due back next year to undertake another survey. In the meantime, Lama Lama Rangers are keeping their eyes out for dolphins in their sea country.

Lama Lama Rangers

# DOLPHIN RESEARCH



Marrpa Chaos takes to the water.



Rangers in research boat.

# Harvesting Traditional Knowledge:

## A national two way learning & industry development initiative

**The Association of Northern, Kimberley and Arnhem Aboriginal Artists Aboriginal Corporation (ANKAAA) and NAILSMA are collaborating on a series of projects that will further some of the similarities in our organisations' visions and goals.**

NAILSMA staff attended an ANKAAA workshop held at Buku-Larrnggay Mulka Art Centre, Yirrkala in May 2013. The workshop, Harvesting Traditional Knowledge, brought together Indigenous artists from across northern Arnhem Land, the Tiwi Islands and the Kimberley, and conservators from national and state museums and art galleries across Australia.

The workshop provided a unique platform for Indigenous traditional knowledge experts, including artists and land and sea managers, to come together with art industry experts from across Australia, including western scientists, to focus on the conservation and production techniques of artwork made with traditional bush materials.

The workshop was led by Traditional Owners from north-east Arnhem Land, ANKAAA and project partners Buku-Larrnggay Mulka Art Centre and Melbourne University's Centre for Material Cultural Conservation. The workshop involved a day out exploring beautiful bushland where senior artists from Buku-Larrnggay Mulka, including Djambawa Marawili and Yinimala Gumana, showed workshop participants how the bark is cut, stripped, burnt and prepared for painting. Although modern tools, such as axes, were used to cut into the bark, traditional knowledge held by senior artists ensures that the bark is cut in the right

way, at the right time and therefore remains in one piece. Senior women weavers from across northern Arnhem Land took participants through the process of harvesting, preparing and dyeing pandanus for weaving. The women also made bush damper for all to enjoy!

ANKAAA held a second workshop at Mowanjum Spirit of the Wandjina Aboriginal Corporation in Derby, WA in September. Ten conservators from institutions including the National Gallery of Australia, the Museum of Contemporary Art and Museums Victoria took part in the workshop, as well as over 30 Aboriginal artists from the Kimberley region, and several guests from the Northern Territory. Participants learned from senior cultural expert Sam Lovell and artists from Kimberley Art Centres about boomerang and spear making, as well as having specific discussions about traditional materials such as boab fibre, pearl shell, boab nut carvings, ochre, sap, kangaroo sinew, and spinifex gum. They also shared knowledge about caring for community collections, which is an important topic for many art centres across the Top End and the Kimberley who wish to safeguard their collections for future generations.

ANKAAA's AGM and annual conference on November 6th included a third workshop, this time on string-making. Artists Regina Wilson from Durrmu Arts and Lily Roy from Milingimbi Arts led the workshop together with Judy Manany from Elcho Island Arts, while Robyn McKenzie from the Australian National University shared some of her research on string figures.

**Right:** Traditional Owner and Chair of ANKAAA, Djambawa Marawili, showing a NAILSMA staff member how to cut bark that has just been harvested from a stringybark tree (Eucalyptus tetrodonta).

NAILSMA I-Tracker officer Erica McCreedy has participated in discussions with ANKAAA workshop participants that specifically looked at recording information about the resources that are being harvested and used by Indigenous artists and where these resources are obtained from. NAILSMA is currently working with the Yirralka Miyalk (Women) Rangers to develop and trial an I-Tracker Bush Harvest Application to record information about the materials harvested for the production of native bush skin care products. Many of the plants harvested by the Miyalk Rangers are used for bush products, medicinal purposes and as art materials, and the Application will help the rangers record information including traditional knowledge, the Yolngu seasonal calendar, plant identifications, and distribution and harvesting locations. The current Application can easily be modified to include specific information about the resources that are harvested and used by Indigenous artists.

Discussions will continue between NAILSMA and ANKAAA as we explore parallels between the type of information useful to both Indigenous artists and land and sea managers. As with all I-Tracker Applications, the development of this Application will be dependent on collaborating with artists and community art centres to ensure the Application meets their requirements.

For more information on the workshops please visit the ANKAAA website [www.ankaaa.org.au](http://www.ankaaa.org.au)

**ANKAAA and NAILSMA**



Boab nut art at Mowanjum Artists Spirit of the Wandjina.



Kirsty Burgu, Chairwoman of Mowanjum with Melanie Forward from Museum of Contemporary Art.



Senior Kimberley artist Sam Lovell teaching NT Buku-Larrnggay Mulka Arts worker Barawuya Munugurr boomerang making.



Sam Lovell talking about traditional Kimberley objects.

# Narnu-Yuwa ki-Wundanyukawu Law for the Sea Turtle



li-Anthawirriyarra Rangers tag a nesting green turtle.

For two weeks each year in late September and early October, li-Anthawirriyarra Sea Ranger Unit runs a turtle camp. The camp coincides with peak nesting season for wundunyuka (sea turtles).

li-Anthawirriyarra Sea Ranger Unit is a Yanyuwa initiative, working for the families to keep kin and country strong. Therefore, one of our priorities over the course of turtle camp is to get as many family members—especially kids and older people—back on country while we do our research work with wundunyuka.

This year, there were days when we had over 80 people out at Maabaj (North Beach) on West Island. In addition to family, we also played host to some special paying guests and a small contingent of Thamarrurr Rangers from Wadeye. The paying guests are part of family plans to establish small-scale, low impact eco-tourism developments on parts of the Yanyuwa estate. These developments will help li-Wirdiwalangu (senior Yanyuwa people) manage visitors to their country, keep visitors educated and safe, and keep the business funded for future generations.

During the camp, the visitors were able to get up close and personal with wundunyuka, mostly wirndiwirndi (flatback

turtles). The visitors enjoyed watching them dig their nests and lay their eggs as well as witnessing little hatchlings making their perilous first journey to the sea. Perhaps more importantly, the visitors were free to interact with the Yanyuwa and Mara families, and were invited to participate in a number of specific cultural activities such as a singing workshop with the Borroloola Songwomen.

The turtle camps are an outstanding opportunity for visitors to learn about our country. On this recent camp, two of the younger rangers used two large kujika (songline) maps for country. They then took the visitors on a boat tour around some of the islands, so they could see firsthand some of the country that has inspired the rich narratives that arise from a sophisticated Yanyuwa understanding of human/environmental interdependence.

These camps would not be possible without the work and assistance of our many friends and partners who have supported this venture from its beginning. Special thanks are due to Thomas, Shirley and the whole Simon family for allowing this event to take place on their country. Yamulu barra, Bawuji.

**Stephen Johnson**  
li-Anthawirriyarra Sea Ranger Unit



**Clockwise from top:** Turtle camp visitors relax in our newly constructed Eco Structures at Maabaj, West Island. Photo: li-Anthawirriyarra Sea Ranger Unit

Shirley Simon with (L-R) nephews Stan (Junior) Ellen and Sebastian (Sebbie) Evans North Beach, West Island. Photo taken as part of ABC Open Workshops with Will Tinapple.

Song sessions. Photo: Gulf Country Museology

Recently emerged flatback turtle hatchling.

li-Anthawirriyarra Ranger watches turtle hatchlings emerge.





*Clockwise from this page: Djelk Rangers Lawrence Watson and Darryl Redford, ready to defend themselves against crocodiles while collecting eggs. Estuarine crocodile egg. Djelk Rangers Romeo Lane and Tara Rostron care for crocodile hatchlings.*



# CROCODILE hatchery

**Harvesting crocodile eggs and selling the hatchlings to commercial crocodile farmers is one way of building up a sustainable business enterprise in a remote community.**

The Djelk Rangers, based in Maningrida NT, are one of the very few ranger groups that are actively collecting, incubating and hatching crocodile eggs.

The rangers have been harvesting crocodile eggs since 1992, and in 2009 they began incubating and hatching eggs to sell to crocodile farms.

The rangers harvest the eggs from crocodile nests during the early part of the wet season. Crocodile nests are often built up with sticks, grass and piles of dirt, and an average nest holds about 50 eggs. The rangers spot the nest from a helicopter and then rangers approach the nest on the ground, with nothing more than long boat oars to protect them from an angry female crocodile trying to defend her nest.

The rangers collect the eggs and take them back to the ranger station to be put into incubators, where they are held for up to 90 days before they hatch. It's important that crocodile eggs are placed the same way they are found in the nest in the incubator, otherwise the hatchling will die.

To ensure this happens, the rangers mark the egg from top to bottom the way they found it in the nest and lay it the same way in the incubator.

Now after 23 years of harvesting eggs and 4 years of successfully hatching crocodiles, the Djelk Rangers are developing their capacity through training and trials to take the next step in the farming process. This will involve growing hatchlings to around 600 mm for sale, and builds on their existing enterprises to allow them to command a better price and create more local jobs.

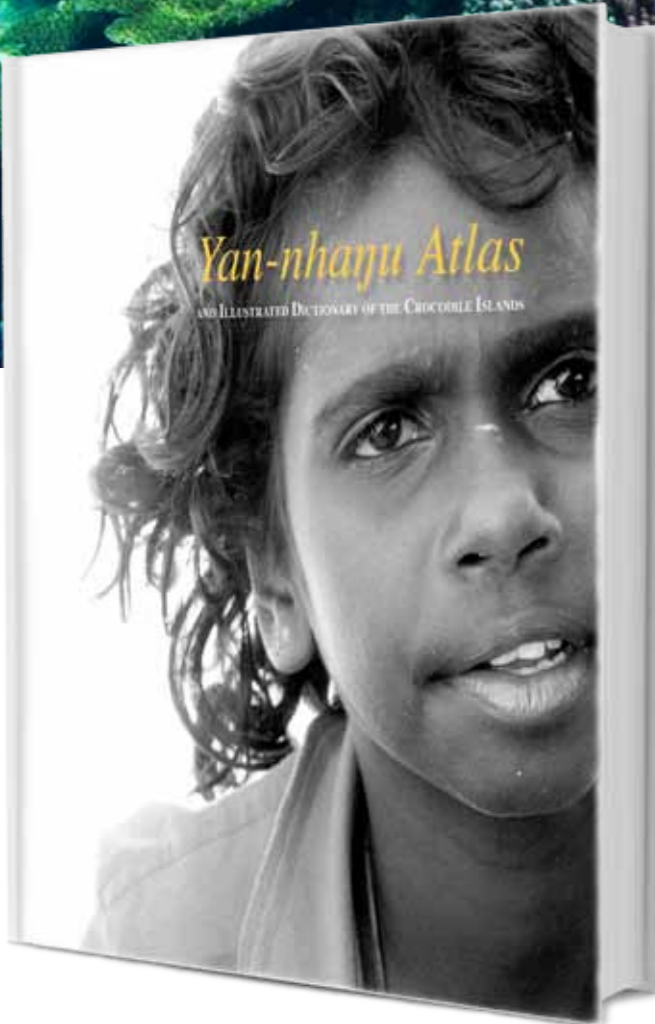
The women rangers are tasked with the job of caring for the hatchlings until they are big enough to be sold to the major crocodile farms. Some of the women rangers recently took part in a three week training workshop at Crocodylus Park in Darwin to learn how to care for both eggs and hatchlings. A customised house has been built for the hatchlings by the rangers, in conjunction with the Learning on Country participants from Maningrida College.

The continued expansion of this industry, coupled with the increasing capacity and skills of the rangers, will help ensure that the Djelk Rangers continue to be a part of the Northern Territory's world-class crocodile industry.

**Djelk Rangers**

# The Yan-nhangu Atlas

AND ILLUSTRATED DICTIONARY OF THE CROCODILE ISLANDS



**Laurie Baymarrwangga, 2012 Senior Australian of the Year, was born nearly a hundred years ago on Murrungga, largest of the outer Crocodile Islands. For the last twenty years, she has been working on a trilingual atlas and dictionary for children. Together with anthropologist and linguist Bentley James, she has created the Yan-nhangu Atlas and Illustrated Dictionary of the Crocodile Islands.**

This stunning 450 page reference documents the rich natural, historical and cultural knowledge of the region in full colour. The book includes the remarkable photographs of Donald Thomson (1937), W. Lloyd Warner (1929) and Sir Hubert Wilkins (1925). A companion bilingual education



resource for Yolngu-speaking children in homelands schools across north-east Arnhem Land will be made available for free, as a gift from Laurie to the children because it is their ancestral inheritance.

The atlas is written in three languages: English, Yan-nhangu and Yolngu matha, the regional Indigenous language of some 7000 speakers. The book recognises and reinforces the right to bilingual education, and Baymarrwangga, who continues to give life to her own language, champions appropriate education as key to maintaining Indigenous culture and identity.

Before 1993, there were only 300 Yan-nhangu words recorded, but now there are more than 4000. These words reflect the diverse cultural knowledge gained by generations of intimate coexistence with the environment of the Crocodile Islands, and this book is a crowning achievement of Baymarrwangga's lifework to provide her people a living cultural future.

Laurie's concern for kin and country has generated a number of projects that promote and support living on country and sustainable livelihoods. Indigenous homelands are places where people care for cultural and biological diversity through traditional knowledge. This wisdom resonates with the global need for a sustainable future.

More information is available at [crocodileislandsrangers.wordpress.com](http://crocodileislandsrangers.wordpress.com)

**Dr Bentley James  
Yan-nhangu Atlas and Illustrated Dictionary  
of the Crocodile Islands Team**



**Clockwise from above:** Seasons of the Crocodile Islands (illustration: Leonie Richards, Yan-nhangu Atlas p. 36).

Rock pools of the Crocodile Islands (illustration: Leonie Richards, p. 45).

Bomutharra (fiddler crab, *Uca vocans*; photo: Pat Backwell, p. 222).

Ngamupa (tunicates; photo: Gary Bell, p. 34).

Gababuka (fiddler crab, *Uca flamula*; photo: Pat Backwell, p. 260).

Cover of the Yan-nhangu Atlas.

Banumbirr (blue starfish, *Linckia laevigata*, also means the morning star, Venus; photo: Gary Bell, p. 211).



# NAILSMA wins two Territory NRM awards

**NAILSMA has been recognised for its work in natural resource management in the Northern Territory, taking home two awards at the first ever NT Natural Resource Management Awards, held in Darwin on November 6.**

The I-Tracker Program took out the award for Best Collaboration in NRM, while CEO Joe Morrison received the Special Achievement in NRM award in recognition of his decades of work supporting Traditional Owners' efforts to care for country.

Joe Morrison has spent the last 20 years working with rural and remote communities throughout north Australia. In 1997, he was awarded the Young Australian of the Year for his environmental work in the Northern Territory. He has worked with Parks and Wildlife NT, and has spent the last ten years working with NAILSMA.

As CEO of NAILSMA, Joe has championed efforts to support Indigenous land and sea managers across north Australia to continue to live on their traditional lands and care for their country. Joe has guided NAILSMA in bringing together Indigenous ranger groups, government agencies, scientists, and philanthropic, industry and Indigenous leaders to develop a collaborative Indigenous-led approach to north Australia's development.

The NAILSMA I-Tracker program also took home an award for its work supporting Indigenous land and sea managers across north Australia. The program assists Indigenous rangers to undertake natural and cultural resource



*Brianna Shaw, NAILSMA Indigenous Trainee in Communications, hands over the award trophy to NAILSMA CEO Joe Morrison. Brianna accepted the award on Joe's behalf at the Territory NRM Awards Gala Dinner.*

monitoring, research and management activities using digital technology and equipment, and is a key part of NAILSMA's strategy to develop livelihood opportunities in north Australia that are based on the cultural and traditional responsibilities of Indigenous people to care for their country.

Collaboration is fundamental to the success of the I-Tracker program as it allows for continuous feedback and development tailored to the needs of Indigenous ranger groups. NAILSMA coordinates a number of workshops and forums annually, providing a platform for Indigenous land and sea managers to share their experiences with other land and sea managers and to access expertise.

The awards are a significant recognition of the leadership Mr Morrison provides to the Indigenous management of natural resources in the NT, and a validation of the importance of working on issues of social justice and human rights through the lens of caring for natural and cultural resources.

## Thanks to contributors

ANKAAA  
 Bentley James  
 Coastal Stewardship Network  
 Crocodile Islands Rangers  
 Dhimurru Aboriginal Corporation  
 Djelk Rangers  
 Heidi Taylor  
 Jacqueline Novoselac  
 Jonathan Wearne  
 Lama Lama Rangers  
 li-Anthawirriyarra Sea Ranger Unit  
 Mapoon Aboriginal Shire Council  
 Mapoon Land and Sea and Cultural Heritage Rangers  
 Mo Pawero  
 Natalie Holland  
 Neil Burrows  
 Simone McMonigal  
 Sonia Leonard  
 Stephen Johnson  
 Wagner Quirós  
 Wunambal Gaambera Aboriginal Corporation  
 Yirralka Miyalk Rangers

## About Kantri Laif

Kantri Laif is NAILSMA's premier publication, showcasing stories about Indigenous land and sea management. Stories come from Indigenous individuals and communities, and those who work with them, and highlight the aspirations, challenges and achievements of Indigenous people looking after their land and sea across north Australia.

The name 'Kantri Laif' (coun-try life) is spelt in Kriol. The name is not intended to reflect any other publications with similar names.

## Subscriptions

Kantri Laif is available as both an electronic and print publication. Current and past issues are available on our website; please email or write if you would like printed copies mailed to you. You can also subscribe to this and other free publications (print and electronic) through our website.



*Print issues available: 3, 5, 6, 7*

## Call for stories

NAILSMA welcomes stories about Indigenous land and sea management for future issues of Kantri Laif. A formal call is usually sent to previous contributors a few months before each issue is published; please contact us if you would like to submit a story for our next issue.

## Contact us

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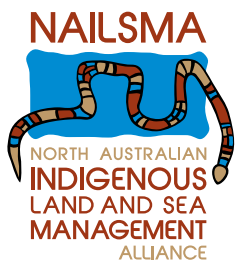


*Brianna Shaw accepts the Special Achievement in NRM award, on behalf of Joe Morrison, from Territory NRM Chair Kate Andrews.*



*Kate Andrews, Graham Friday, Grace Wunungmurra, and NAILSMA I-Tracker program staff Erica McCreedy, Micha Jackson, and Billee McGinley accept the award for Best Collaboration in NRM.*

# Looking after Our Country... Our Way



## About NAILSMA Ltd

We are an Indigenous-led not-for-profit company with a decade of experience delivering large-scale initiatives across north Australia. We are committed to finding practical solutions that support Indigenous people in the management of their lands and seas for future generations. Our culture-based economy approach aims to assist Indigenous people through livelihoods and employment on their country. We have a strong track record of delivering award-winning programs in challenging and complex settings.

*Back cover: (L-R) Robert Graham, Ron Archer, Teik Oh, Angela Shima, Joe Morrison, Cissy Gore-Birch Gault, Peter Yu, Samuel Bush-Blanasi, Guy Fitzhardinge.*